EFFECTIVE INTEGRATION OF ICT TO ENHANCE ACCESSIBILITY, PERSONALIZATION, COLLABORATION, AND EDUCATOR TRAINING IN INCLUSIVE EDUCATION

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ABSTRACT

Inclusive education ensures that all learners, regardless of their abilities or backgrounds, participate fully in mainstream schooling. However, barriers such as limited accessibility, insufficient differentiated resources, and inadequate teacher preparation often undermine these goals. This paper examines the transformative potential of Information and Communication Technology (ICT) in strengthening inclusive education. We review the principles of inclusion and explore how ICT tools ranging from adaptive software and assistive devices to multimedia platforms and open educational resources personalize learning, enhance communication, and foster collaboration among students, educators, and families. In particular, we highlight the role of assistive technologies (e.g., screen readers, speech-to-text applications, eye-tracking systems) in breaking down sensory and physical barriers, and the importance of ICT-driven professional development in empowering teachers to design accessible curricula and leverage data-driven insights. Finally, we discuss key challenges to ICT integration such as infrastructure deficits, digital literacy gaps, and attitudinal barriers and propose strategic interventions, including targeted investments, public–private partnerships, and ongoing capacity building. Our findings underscore that, when thoughtfully implemented, ICT can significantly advance equity, participation, and learning outcomes in inclusive settings.

KEYWORDS: *Inclusive Education; Information And Communication Technology (ICT); Assistive Technologies; Teacher Professional Development; Digital Equity.*

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